BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

*** * * * * * ***

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 41H 30116359 BY LAZY J UTILITY ASSOCIATION	**)** **)** **)**	**PRELIMINARY DETERMINATION TO GRANT PERMIT**

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On January 17, 2019, Lazy J Utility Association (Applicant) submitted Application for Beneficial Water Use Permit No. 41H 30116359 to the Bozeman Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for a flow rate of 0 gallons per minute (GPM) and a volume of 59.05 acre-feet (AF) for municipal use. The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated July 15, 2019. The Applicant responded with information dated October 7, 2019. The Applicant received an aquifer testing requirement variance on November 28, 2018 and December 4, 2018. The Application was determined to be correct and complete as of September 8, 2020. The Department met with the Applicant on February 27, 2018 and on November 28, 2018. A Waiver of Timelines form was received on January 6, 2021. An Environmental Assessment for this Application was completed on March 4, 2021.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Attachments
- Maps:
    - Appendix A, Property Ownership Map

- Appendix B, Proposed Water System Map
- Appendix G, Originally Proposed Development
- ATA.2.a., Map 1, Topographic map with production and observation wells and water discharge point
- ATA.2.a., Map 2, Topographic map with production and observation wells and water discharge point

- Aquifer Testing Addendum
  - Letter from Applicant to DNRC dated October 16, 2018, Re: Permit Application 41H 30116359 - Pump Test and Form 633 Variance Request
  - Letter dated November 28, 2018 granting variance request from Kerri Strasheim, Department, to Lazy J Utility Association
  - Letter from Applicant to DNRC dated December 4, 2018, Re: Permit Application 41H 30116359 - Request for Variance from Aquifer Testing Requirements Wells 2 and 3
  - Letter dated January 14, 2019 granting variance request from Kerri Strasheim, Department, to Lazy J Utility Association
- Basin Closure Area Addendum & Hydrogeologic Assessment Report Addendum
- Aquifer Test Report dated August 13, 2020, Attila Folnagy, DNRC Water Management Bureau
- Depletion Report dated August 13, 2020, Attila Folnagy, DNRC Water Management Bureau

Information Received after Application Filed

- Letter from Applicant to DNRC dated October 7, 2019, Re: Response to Deficiency Letter for Permit Application 41H 30116359. Includes updated landscape design and irrigation water use (Table 1 and Exhibit A) and Design Standards for homeowners (Exhibit B).

Information within the Department's Possession/Knowledge

- Permit to Appropriate Water- Provisional, 41H 30025398 (associated right)

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA).

PRELIMINARY MATTERS

This permit application supplements existing permit 41H 30025398 (aka Bostwick Permit). Permit 41H 30025398 was applied for on December 1, 2006, and was granted on December 9, 2011. The Court-approved mitigation plan was granted on July 14, 2017. In that timeframe, the development plans for Tract 2 have changed. 41H 30025398 permitted water for both Tract 1 and Tract 2 in the Big Sky area. This supplemental permit is for Tract 2 only, so the discussion is going to center on the current development plans for Tract 2 (see Figure 1).

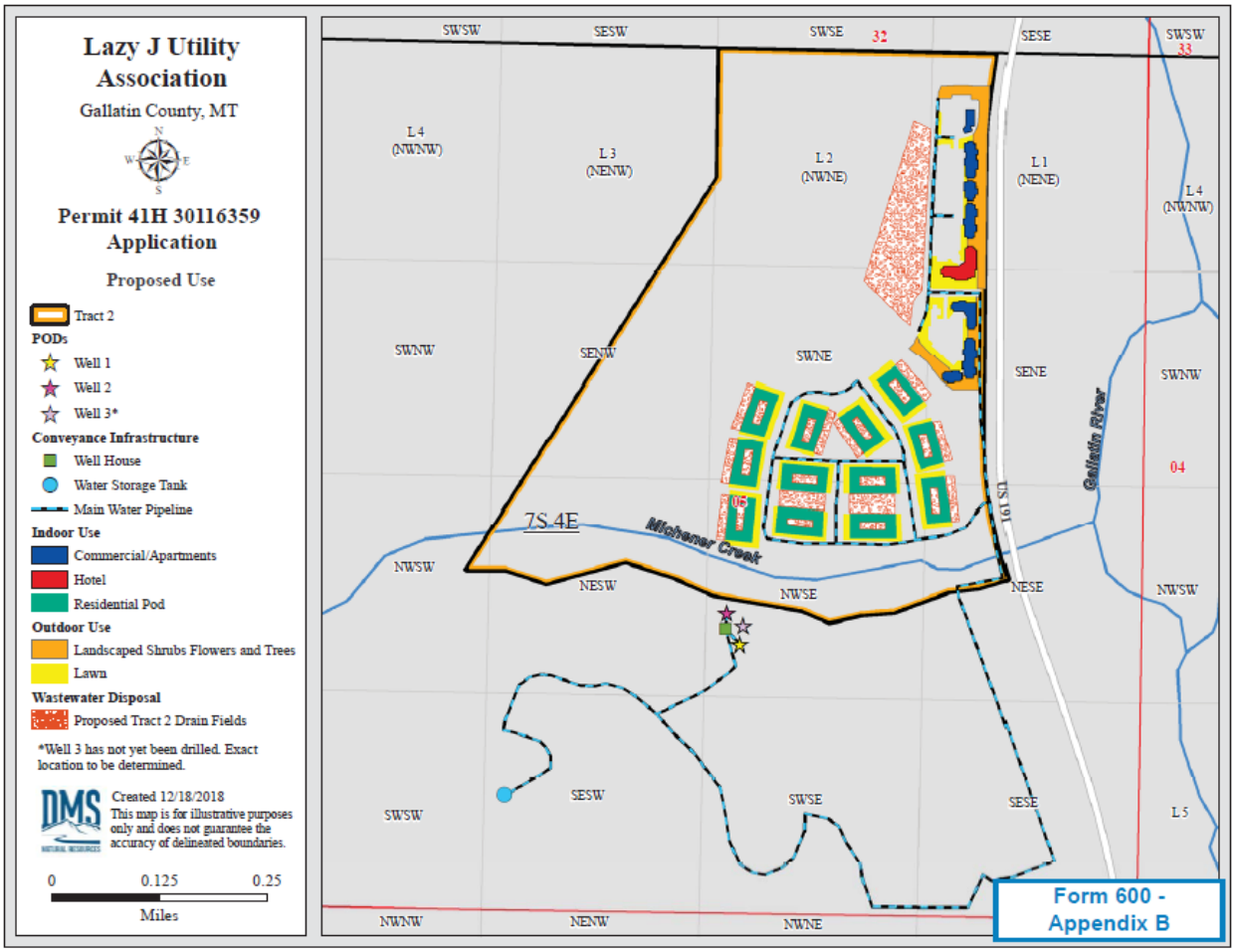

Figure 1. Overview map showing the project area, places of diversion, places of use, and conveyance infrastructure. Appendix B of application materials, received January 14, 2019.

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert groundwater from a well, from January 1-December 31 for up to 59.05 AF diverted volume for municipal (multiple domestic and commercial) use from January 1-December 31. The proposed appropriation will supplement water use on Tract 2 of COS 2540 currently provided by provisional permit 41H 30025398 (original permit) for a combined total use of 182 GPM and 83.21 AF diverted volume on Tract 2. The Applicant's

proposal is due to a revision of their development plan for Tract 2. This revised plan reduces the amount of water used for irrigation under the existing permit and increases the amount of water used for multiple domestic and commercial development within Tract 2. This permit is for volume only; the flow rate permitted under provisional permit 41H 30025398 is adequate to satisfy the flow rate needs for Tract 2 under the revised development plan. This permit will not be a stand-alone permit, it must be used in conjunction with provisional permit 41H 30025398.

2. The calculated consumptive use for the multiple domestic and commercial uses for the proposed appropriation is 5% of the total use, or 2.95 AF (59.05 x 0.05 = 2.95). The reduction in irrigation demand being developed under provisional permit 41H 30025398 will reallocate consumptive use needed for the additional domestic and commercial connections proposed on permit application 41H 30116359 so that the total consumptive use of both permits will not exceed 39 AF. The consumptive use of 2.95 AF for the proposed appropriation and consumptive use of 36.05 AF for provisional permit 41H 30025398 will be mitigated by mitigation change 41H 30102910.

3. Provisional permit 41H 30025398 was initially issued with the plan to use 24.02 AF diverted volume and 13.59 AF consumed volume for the development of Tract 2. Of this amount, 13.04 AF of both diverted and consumed volume was to be used for lawn and garden irrigation, and 10.98 AF diverted volume and 0.55 AF consumed volume were to be used for multiple domestic use. Covenants were drawn up that slightly reallocated the water between tracts, with Tract 2 getting 24.16 AF of diverted volume and 13.62 AF of consumed volume. The reduction in lawn & garden irrigation on Tract 2 under provisional permit 41H 30025398 will be 9.96 AF diverted and consumed volume, leaving 3.66 AF of consumptive use to provide for potable water service connections on both provisional permit 41H 30025398 (0.71 AF) and this pending permit (2.95 AF). These changes will redistribute how water is used within Tract 2 and has increased the amount of water which will be diverted, but not consumed, upon completion of the development of Tract 2. Table 1 outlines water use under the revised development plan for Tract 2.

Table 1. Water use for Tract 2, COS 2540, based on Applicant's revised development plan

	Permit 41H 30025398	**Permit 41H 30116359**	**Total**
Flow (GPM)	182	0	182
Total Diverted Volume (AF)	24.16	59.05	83.21
Total Consumed Volume (AF)	10.67*	2.95	13.62
Purpose Specific Information			
Diverted Volume for Municipal (Domestic and Commercial) Use	14.2	59.05	73.25
Diverted Volume for Municipal (Lawn & Garden Irrigation) Use	9.96	0	9.96
Consumed Volume for Municipal (Domestic and Commercial) Use	0.71	2.95	3.66
Consumed Volume for Municipal (Lawn & Garden Irrigation) Use	9.96	0	9.96

*13.62 AF was the consumptive component for Tract 2 in the original permit, so this total is not exceeded in combination.

4. The Department concluded in the Applicant's provisional permit #41H 30025398 that the Gallatin River is hydraulically connected to the source aquifer. The potentially affected reach of Gallatin River is downstream of its intersection with the Big Sky Syncline in Section 9, Township 7 South, Range 4 East, Gallatin County. The proposed appropriation is less than 0.25 miles from Michener Creek. Two wells, GWIC #230187 and #124071, suggest no hydraulic connection to Michener Creek.

5. All unconsumed water of the proposed diversion will return to shallow groundwater as Level 2 treated wastewater. Effluent leaving residential and commercial units will be conveyed by pipes to a wastewater treatment facility. Treated water will be discharged to approximately 12 acres of drain fields where it will infiltrate to groundwater by means of an underground infiltration system.

6. Conditions:

1. Measurement Conditions to match original permit
    i. THE APPROPRIATOR SHALL INSTALL OR CAUSE TO BE INSTALLED METERS APPROVED BY THE DEPARTMENT TO RECORD THE FLOW RATES AND VOLUMETRIC AMOUNTS OF ALL WATER DIVERTED FROM GROUND WATER AT EACH WELL. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICES ARE IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A MONTHLY WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED TO THE REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.
    ii. A FLOWMETER WITH TRANSMITTER SHALL BE INSTALLED IN THE PUMP HOUSE TO RECORD FLOW RATES AND TOTALIZE FLOW VOLUMES FROM THE WELL.
2. Diversion Means Condition to match original permit:

i. DIVERSION ID 2 AND 3 ARE REDUNDANT WELLS. ONLY 1 OF THE 3 WELLS MAY BE USED AT ONE TIME.

3. Mitigation Condition:
    i. USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON MITIGATION BEING PROVIDED UNDER CHANGE AUTHORIZATION 41H 30102910. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE UNTIL THE PERMITTEE RECEIVES APPROVAL TO INCLUDE THIS PERMIT AS BEING MITIGATED UNDER CHANGE AUTHORIZATION 41H 30102910. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE IF MITIGATION WATER AS HEREIN REQUIRED IS NOT OBTAINED. DIVERSION UNDER THIS APPLICATION, EXCEPT FOR EMERGENCY USE, MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION AND DURATION CEASES.
4. Adverse Effect Condition:
    i. THIS PERMIT IS SUPPLEMENTAL TO PROVISIONAL PERMIT 41H 30025398 FOR WATER USE ON TRACT 2 OF COS 2540. THE APPLICANT PROVIDED A PLAN OF DEVELOPMENT FOR TRACT 2 OF COS 2540 WHICH DIFFERS FROM THE PLAN SUBMITTED FOR PROVISIONAL PERMIT 41H 30025398. THE APPLICANT IS RELYING ON THE NEW PLAN OF DEVELOPMENT IDENTIFIED IN THE APPLICATION MATERIALS OF THIS PERMIT TO PROVE THE ADVERSE EFFECT CRITERIA. IF IRRIGATION UNDER PROVISIONAL PERMIT 41H 30025398 EXCEEDS A DIVERTED AND CONSUMED VOLUME OF 9.96 AF FOR TRACT 2 OF COS 2540, AND THE TOTAL CONSUMPTIVE USE OF TRACT 2 EXCEEDS 13.62 AF, THE DEPARTMENT SHALL PURSUE REVOCATION OF THIS PERMIT (41H 30116359) UNDER 85-2-314.

BASIN CLOSURE

FINDINGS OF FACT

7. This application for a groundwater permit is for municipal use based on the Applicant's plan of operation and use in conjunction with original permit 41H 30025398 and associated mitigation change 41H 30102910. As this permit doesn't change the net depletions from this public water supply, no new mitigation plan is required. This new permit will be associated to the original permit and mitigation change application. This Application is located within the Upper Missouri River Basin Legislative Closure, which was closed effective April 16, 1993.

8. The Applicant submitted a hydrogeologic assessment determined to be correct and complete, showing no additional net depletion to surface water or changes in net depletion to surface water based upon the plan of completion of the unperfected original permit and no changes to the total consumed volume amount that is already mitigated. They further received a variance from the aquifer testing requirements in a November 28, 2018, letter, and January 14, 2019, letter.

CONCLUSIONS OF LAW

9. DNRC cannot grant an application for a permit to appropriate water within the Upper Missouri River Basin until final decrees have been issued in accordance with Title 85, Chapter 2, Part 2, MCA. § 85-2-343(1), MCA. The Upper Missouri River Basin consists of the drainage area of the Missouri River and its tributaries above Morony Dam. § 85-2-342(4), MCA. The proposed wells are located within the Upper Missouri River Basin closure area. This Application is for groundwater. The Application falls under the exceptions for the basin closure, § 85-2-343, MCA.

10. Pursuant to § 85-2-362, MCA, a combined application for new appropriations of groundwater in a closed basin shall consist of a hydrogeologic assessment with an analysis of net depletion, a mitigation plan or aquifer recharge plan if required, an application for a beneficial water use permit or permits, and an application for a change in appropriation right or rights if

necessary. § 85-2-363, MCA. ARM 36.12.120. E.g., *In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No.76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer* (DNRC Final Order 2010, Combined Application) (combined application under §85-2-363, MCA, reviewed as a single unit).A basin closure exception does not relieve the Department of analyzing § 85-2-311, MCA criteria. Qualification under a basin closure exception allows the Department to accept an application for processing. The Applicant must still prove the requisite criteria. E.g., *In The Matter of Application for Beneficial Water Use Permit No. 41K-30043385 by Marc E. Lee* (DNRC Final Order 2011); *In The Matter of Application for Beneficial Water Use Permit No. 41K-30045713 by Nicholas D. Konen*, (DNRC Final Order 2011).

11. As conditioned, the Applicant's reliance upon mitigation from change 41H 30102910, which was already approved for 39 AF of mitigation, establishes that a combined application is not required, and a petition to modify the change application condition to reflect this new permit will be required.

§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

12. The Montana Constitution and Montana Water Use Act recognize the protection of senior appropriations while at the same time providing for the development and use of the waters of the state by the public. Mont. Const. Art. IX, §3; Mont. Code Ann. § 85-2-102; *Montana Power Co. v. Carey*, 211 Mont. 91, 96, 685 P.2d 336, 339 (1984)(the MWUA provides for the regulated development of water use in Montana through allowing for the new appropriation of water and protecting senior water rights from encroachment by junior appropriators).

13. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. *See* § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA, by a preponderance

of the evidence. *Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation*, 2009 MT 181, ¶ 21, 351 Mont. 26, 208 P.3d 868 (*Bostwick I*); *Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner*, 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080 (1996)("Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.").

14. Under this Preliminary Determination, the relevant permit criteria in Mont. Code Ann § 85-2-311 are:

> … the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:
>
> (a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and
>
> (ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:
>
> (A) identification of physical water availability;
>
> (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
>
> (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.
>
> (b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. [The applicant is not required to prove a lack of adverse effect for any water right identified in a written consent to approval filed pursuant to subsection (9) in connection with a permit application.];
>
> (c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;
>
> (d) the proposed use of water is a beneficial use;
>
> (e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use . . .

The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. *Bostwick I*, ¶ 21. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria. *Montana Power Co. v. Carey*, 211 Mont. 91, 96, 685 P.2d 336, 339.

Physical Availability

FINDINGS OF FACT

15. GWIC # 223891 and GWIC # 227731 are flowing wells completed to a depth of 1,278 feet and 1,325 feet, respectively. These wells are completed in fractured sandstone/shale of the Cretaceous Lower Thermopolis Formation. The fractured aquifer has a thickness of approximately 40 feet thick (well logs). An aquifer test variance from ARM 36.12.121 (3) (a), (c), (h), (j) has been granted by the DNRC Bozeman Regional Office on November 28, 2018. During the 72-hour aquifer test, the discharge was not maintained at a constant pumping rate and not recorded based on the Form 633. There was also no measurable drawdown in the observation well or background groundwater levels collected. An additional aquifer test variance, dated January 14, 2019, was granted that permitted the Applicant to submit results from a single well aquifer test. Information used to determine physical availability was obtained from the existing form 633 completed for Provisional Permit 41H 30025398.

16. The water levels in the pumping well (GWIC # 223891) and 4 observation wells were collected using In-situ® data loggers and pressure transducers. The raw data were converted to depth to water based on a manual measurement with an electric tape on a shut-in pressure measured in psi and converted to feet of water using a conversion factor of 2.307 feet per psi. These data were converted to drawdown which is the difference between the water level at a specified time after pumping starts and the SWL observed at time (t = 0). No background groundwater levels were collected prior to the aquifer test.

17. The 72-hour aquifer test started on November 28, 2005, at 10:49 A.M. The test continued without interruption, until 10:50 A.M. on November 30, 2005, at an average flow rate of 181

GPM. The discharge was measured using a flow meter and conveyed 300 feet to the southeast away from the aquifer testing site. According to the DNRC Form 633 provided by the Applicant, the initial flow rate was 173 GPM, decreased to 152 GPM at 7 minutes, and increased to 182.5 GPM at 235 minutes for the remainder of the aquifer test. The changes in pumping rate are related to generator failure at 7 minutes and being restored at 235 minutes into the aquifer test. The maximum drawdown in the pumping well was 779 feet below the static water level of 327.3 feet ATC. No drawdown was observed in the 4 observation wells.

18. The Department hydrologist found a poor fit between observed data and the solution used by the Applicant, AQTESOLV®, to analyze drawdown from the aquifer test. The Cooper-Jacob (1946) solution for a pumping test in a confined aquifer provided a better fit to analyze the pumping and observation wells. The Cooper-Jacob (1946) solution for the pumping well generated an aquifer transmissivity of 39.4 ft^2/day. A reliable storativity cannot be calculated using data from the pumped well because it correlates with the radius in the equation for the well function. The storativity of 5×10^{-4} from provisional permit # 41H 30025398 is used for evaluating the permit criteria for the source aquifer.

19. GWIC # 223891 was evaluated with a 72-hour aquifer test at an average rate of 181 GPM with the maximum drawdown of 779 feet below the static water level of 327.3 feet ATC, leaving 64 feet above its pump (515.7 feet below top of casing). Determining the drawdown for the proposed primary well (GWIC # 223891) is done by modeling the period of diversion using the monthly pumping schedule (Table 2) provided by the Applicant which accounts for the proposed volume and volume associated with provisional permit # 41H 30025398. The well efficiency is calculated from modeling the 72-hour aquifer test conducted on the proposed well and dividing the predicted drawdown by the observed drawdown. Calculated well efficiency is equal to 100 % for GWIC # 223891. The actual drawdown with well loss is calculated by applying the well efficiency to the theoretical drawdown of 740 feet at the end of July. This would leave 103 feet of available drawdown above the pump in GWIC # 223891.

Table 2. Monthly pumping schedule provided by the Applicant for the original permit and the addition of the supplemental permit.

Month	Existing Diversion (AF)	Existing Diversion (gpm)	Additional Diversion (AF) for Proposed Well	Additional Diversion (gpm) for Proposed Well	Total Diversion (AF)	Total Diversion (gpm)
January	3.7	26.8	3.9	28.5	7.6	55.3
Feburary	3.2	26.2	3.6	28.9	6.8	55.1
March	3.7	26.8	4.1	29.7	7.7	56.5
April	3.5	26.8	4.0	30.5	7.6	57.2
May	7.8	56.8	5.1	37.3	12.9	94.1
June	7.7	57.8	5.9	44.4	13.5	102.2
July	11.9	86.8	7.3	53.5	19.2	140.3
August	11.9	86.8	7.2	52.5	19.1	139.3
September	7.7	57.8	5.7	42.8	13.3	100.6
October	7.8	56.8	4.4	32.2	12.2	89.0
November	3.5	26.8	3.9	29.3	7.4	56.1
December	3.7	26.8	4.0	28.9	7.6	55.7
Total	76.0		59.1		135.1	

20. The volume of aquifer flux within the zone of influence, as defined by the 0.01-foot drawdown contour, is 684 AF per annum. The radius of the zone of influence is 14,000 feet. An evaluation of physical groundwater availability was done by calculating groundwater flux through a zone of influence (ZOI) corresponding to the 0.01- foot drawdown contour. Using the Theis (1935) solution, T = 39.4 ft^2/day, S = 5 x 10^{-4}, and a constant pumping rate of 36.6 GPM (equivalent to the requested volume) generated a 0.01-foot drawdown contour. The 0.01-foot drawdown contour extends 14,000 feet from the Applicant's wells. The calculation for groundwater flux (Q) through the delineated area is given by Eq. 1 and is 81,637 ft^3/day or 684 AF/year:

$$Q = TWi$$

Eq.1

where:

T = Transmissivity = 39.4 ft^2/day

W = Width of Zone of Influence = 28,000 ft

i = Groundwater gradient (from provisional permit # 41H 30025398) = 0.074 ft/ft.

21. Surface water was not analyzed as no net depletion is occurring.

22. The Applicant has proven physical water availability in GWIC # 223891 for the additional diversion of 59.05 AF.

CONCLUSIONS OF LAW

23. Pursuant to § 85-2-311(1)(a)(i), MCA, the applicant proved by a preponderance of the evidence that "there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate." § 85-2-311(1)(a)(i), MCA. (FOF 15-22).

Legal Availability:

FINDINGS OF FACT

24. An evaluation of physical groundwater availability for the purpose of evaluating legal availability was done by calculating groundwater flux through a zone of influence (ZOI). The volume of aquifer flux within the zone of influence, as defined by the 0.01-foot drawdown contour, is 684 AF per annum. The radius of the zone of influence is 14,000 feet. Two water rights are located within the ZOI that needs to be evaluated for legal demand (Table 3).

Table 3: Groundwater rights within the ZOI.

Water Right #	Water Right Type	Priority Date	Volume Diverted (AF)
41H 106115 00	PROVISIONAL PERMIT	1/26/1999	94.8
41H 30025398	PROVISIONAL PERMIT	12/1/2006	76.0
		Total	**170.8**

25. Table 4 is a comparison of the water supply and current legal demands for groundwater that could be reduced by any amount due to the proposed appropriation: Subtracting the existing legal demands (170.8 AF) from the calculated groundwater flux (684 AF) gives 513.2 AF per annum.

Table 4: Comparison of groundwater physical and legal availability

Physically Available (AF/year)	Existing Legal Demands (AF/year)	Physically Available-Existing Legal Demands (AF/year)
684	170.8	513.2

26. Fracturing by the Big Sky Syncline intersects the alluvium of the Gallatin River and Michener Creek and suggest a hydraulic connection of the source aquifer to these potentially affected surface water. GWIC # 230187 near Michener Creek is a 100-foot-deep dry well and GWIC # 124071 has a static water level of 15 feet in Michener Creek alluvium. Both wells suggest no hydraulic connection to Michener Creek. The Department concluded in the Applicant's provisional permit # 41H 30025398 that the Gallatin River is hydraulically connected to the source aquifer. The potentially affected reach of Gallatin River is downstream of its intersection of the Big Sky Syncline in Section 9, Township 7 South, Range 4 East, Gallatin County. Depletion by pumping in the bedrock aquifer primarily occurs through propagation of drawdown through fractures in the confining unit to the alluvium of Gallatin River. Therefore, depletion effects are expected to be dampened resulting in constant year-round depletion even though consumption from the requested appropriation is concentrated in the summer. The depletion rates are constant year-round because of the depth to the confined source aquifer. Total depletion of this permit will be 2.95 AF. Since the Applicant has revised their plan of development for Tract 2 and is reducing the amount consumed under provisional permit 41H

30025398 by 2.95 AF to offset the consumption of this proposed appropriation, the depletion report shows no new depletion or change in depletion to surface water as a result of the proposed use.

27. Depletions under this permit will be offset by mitigation authorized in change authorization 41H 30102910. Since the mitigation will offset depletions from this permit, further analysis of legal availability for the depleted surface water source is not required per ARM 36.12.1704(1)(a).

28. The physical amount of water available is 684 AF and the existing legal demands of groundwater total 170.8 AF. The comparison shows that 513.2 AF of water is legally available, which is sufficient to provide the requested volume of 59.05 AF. No new depletions from surface water will result from this permit. The Department finds water is legally available.

CONCLUSIONS OF LAW

29. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that water is legally available during the period in which the applicant seeks to appropriate, in the amount requested based upon a comparative analysis of physical availability of water to the legal demands on the sources impacted by the proposed use. See also ARM 36.12.1704 and 36.12.1705; *Montana Power Co.*, 211 Mont. at 99, 685 P.2d at 340 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

30. Montana water law recognizes the that due to the connectivity between surface water and ground water, except for in unique circumstances, the appropriation of groundwater results in the depletion of surface water through induced infiltration and/or pre-stream capture. Accordingly, an application for applicant groundwater appropriation must prove that the proposed appropriation will not result in surface water depletions, or analyze the legal availability of surface water in light of the proposed ground water appropriation. Where a proposed ground water appropriation depletes surface water, applicant must prove legal availability of amount of

depletion of surface water throughout the period of diversion either through a mitigation /aquifer recharge plan to offset depletions or through a comparative analysis of the legal demands and physical availability of water in the impacted surface water sources. *Montana Trout Unlimited v. DNRC*, 2006 MT 72, 331 Mont. 483, 133 P.3d 224; *Westmont Developers v. DNRC*, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order,* (2011) Pgs. 7-8("DNRC properly determined that Westmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator"; applicant failed to analyze legal availability of surface water where projected surface water depletion from groundwater pumping); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 (Court affirmed denial of permit in part for failure to prove legal availability of stream depletion to slough and Beaverhead River); *Faust v. DNRC et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008)(affirming *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006)); *Montana River Action Network et al. v. DNRC et al.*, Cause No. CDV-2007-602, Montana First Judicial District (2008)(affirming *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007*)*).

31. The Applicant demonstrated that groundwater in the amount requested is legally available in the source aquifer. FOF 28. The withdrawal of groundwater will result in depletions to surface water. The Applicant's plan for operation of the permit offsets all surface water depletions through aquifer recharge and mitigation. FOF 27. As conditioned, the Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. § 85-2-311(1)(a)(ii), MCA. (FOF 24-28).

Adverse Effect

FINDINGS OF FACT

32. *Groundwater*: The drawdown in existing wells was evaluated using the Theis (1935) solution with the following inputs: Transmissivity = 39.4 ft^2 /day, Storativity = 5 x 10^{-4}, and a pumping schedule provided by the applicant. The three wells were modeled as one well due to their close proximity. Drawdown in excess of 1 foot occurs in wells that are 3,650 feet from the proposed extraction wells. There is one water right in the source aquifer that is predicted to experience drawdown greater than 1-foot (41H 106115-00), but the well will still have 1465.8 feet of available water column, allowing the user to reasonably exercise the water right.

33. *Surface Water:* The Department concluded in the Applicant's provisional permit 41H 30025398 that the Gallatin River is hydraulically connected to the source aquifer. The potentially affected reach of Gallatin River is downstream of its intersection of the Big Sky Syncline in Section 9, Township 7 South, Range 4 East, Gallatin County. The proposed use is municipal use for potable water for multiple domestic and commercial connections. The total proposed appropriation is for 59.05 AF diverted volume and 2.95 AF consumed volume.

34. *Applicant's Plan to Not Create Adverse Effect:* Provisional permit 41H 30025398 authorized 182 GPM up to 24.02 AF diverted volume for the Tract 2 portion of the place of use. The authorization included a total of 13.59 AF of consumptive volume, which is mitigated through mitigation change authorization 41H 30102910. Table 5 breaks down total use authorized for Tract 2 under provisional permit 41H 30025398.

Table 5. Water use for Tract 2 as authorized in provisional permit 41H 30025398

	Diverted Volume (AF)	Consumed Volume (AF)
Municipal Use (multiple domestic)	10.98	0.55
Municipal Use (lawn & garden irrigation)	13.04	13.04
Total	24.02	13.59

35. The Applicant has revised their development plan for Tract 2, which includes reallocating how water under provisional permit 41H 30025398 will be used. Under the revised plan, the lawn & garden irrigation portion of the municipal use will be reduced to a total of 9.96 AF. This

reduction will offset the 2.95 AF consumptive use of the new proposed permit (41H 30106359), and 0.71 AF of consumptive use is for the multiple domestic component of the original permit. No reduction in actual acres is occurring, just the amount of water being applied per acre is being reduced.

- The Applicant will meet this consumptive use limit by landscaping with plants that have low water requirements, limiting outdoor water use by homeowners, and returning wastewater to groundwater that is connected to surface water. Irrigation demand from 1035 trees, 677 shrubs, and 840 perennials in addition to the native grasses total 9.93 AF for 16.25 acres, which is 0.611 AF per acre (Table 6). The Applicant submitted Design Standards for the development to the county in "Big Sky Rock, LLC, Application for Conditional Use Permit Planned Unit Development with Cluster Development". The Applicant provided additional information that zoning plan / conditional use permit specifications through the county process will prevent homeowners from going outside plan and will help ensure that permitted flow and volume will not be exceeded. The plans and numbers were derived by landscaping experts.

Table 6. Updated irrigation estimates as of September 30, 2019

		Acres	AF	AF/AC	Trees	Shrubs	Perennials
Residential PODs	Native Grass	8.26	4.13				
Residential PODs	Trees, Shrubs, Perennials		0.72		540	360	720
Total Residential PODs				*0.587*			
Entry Way	Native Grass	3.67	1.84				
Entry Way	Trees, Shrubs, Perennials		0.46		386	261	0
Total Entry Way				*0.625*			
Commerical Area	Native Grass	3.74	1.87				
Commercial Area	Trees, Shrubs, Perennials		0.14		109	56	120
Total Commercial Less sod				*0.536*			
Commericial Area	Sod	0.57	0.78	1.354			
TOTAL		**16.25**	**9.93**	**0.611**	**1035**	**677**	**840**

36. The Applicant's proposed water use under this application will be supplementary and dependent on original permit 41H 30025398 to carry out the full beneficial use on Tract 2. The

2.95 AF of depletions associated with the consumptive use of this permit will require mitigation water provided by mitigation change authorization 41H 30102910 (see Table 7), which was authorized to mitigate 39 AF of consumption by the Lazy J Utility Association public water supply. The mitigation plan was approved in permit 41H 30025398, both by the District Court and the Montana Supreme Court.

Table 7: Total consumption and net depletion for Lazy J Utility Public Water Supply for Tract 2.

Month	**Historic Consumption Schedule (original permit) (AF)**	**New Consumption Schedule (original plus new permit) (AF)**	**Historic Depletion (AF)**	**New Depletion (AF)**	**Net Depletion (AF)**
January	0.17	0.31	1.14	1.14	0
February	0.17	0.31	1.14	1.14	0
March	0.17	0.31	1.14	1.14	0
April	0.17	0.31	1.14	1.14	0
May	0.42	0.52	1.14	1.14	0
June	2.61	2.4	1.14	1.14	0
July	4.17	3.73	1.14	1.14	0
August	3.61	3.26	1.14	1.14	0
September	1.64	1.57	1.14	1.14	0
October	0.17	0.31	1.14	1.14	0
November	0.17	0.31	1.14	1.14	0
December	0.17	0.31	1.14	1.14	0
Total	13.62	13.62	13.62	13.62	

37. The Department finds there will be no adverse effect based on the Applicant's revised development plan for Tract 2 and mitigation being provided under mitigation change authorization 41H 30102910 to offset the consumptive use of this permit. The one water right in the source aquifer that is predicted to experience drawdown greater than 1-foot (41H 106115-00) will still have a sufficient water column available (1465.8 feet of available water column).

38. The application will be subject to the following conditions, limitations, or restrictions.

1. Measurement Conditions to match original permit:
    i. THE APPROPRIATOR SHALL INSTALL OR CAUSE TO BE INSTALLED METERS APPROVED BY THE DEPARTMENT TO RECORD THE FLOW RATES AND VOLUMETRIC AMOUNTS OF ALL WATER DIVERTED FROM GROUND WATER AT EACH WELL. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICES ARE IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A MONTHLY WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED TO THE REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.
    ii. A FLOWMETER WITH TRANSMITTER SHALL BE INSTALLED IN THE PUMP HOUSE TO RECORD FLOW RATES AND TOTALIZE FLOW VOLUMES FROM THE WELL.
2. Diversion Means Condition to match original permit:
    i. DIVERSION ID 2 AND 3 ARE REDUNDANT WELLS. ONLY 1 OF THE 3 WELLS MAY BE USED AT ONE TIME.
3. Mitigation Condition:
    i. USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON MITIGATION BEING PROVIDED UNDER CHANGE AUTHORIZATION 41H 30102910. DIVERSION UNDER THIS

PERMIT MAY NOT COMMENCE UNTIL THE PERMITTEE RECEIVES APPROVAL TO INCLUDE THIS PERMIT AS BEING MITIGATED UNDER CHANGE AUTHORIZATION 41H 30102910. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE IF MITIGATION WATER AS HEREIN REQUIRED IS NOT OBTAINED. DIVERSION UNDER THIS APPLICATION, EXCEPT FOR EMERGENCY USE, MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION AND DURATION CEASES.

4. Adverse Effect Condition:
    i. THIS PERMIT IS SUPPLEMENTAL TO PROVISIONAL PERMIT 41H 30025398 FOR WATER USE ON TRACT 2 OF COS 2540. THE APPLICANT PROVIDED A PLAN OF DEVELOPMENT FOR TRACT 2 OF COS 2540 WHICH DIFFERS FROM THE PLAN SUBMITTED FOR PROVISIONAL PERMIT 41H 30025398. THE APPLICANT IS RELYING ON THE NEW PLAN OF DEVELOPMENT IDENTIFIED IN THE APPLICATION MATERIALS OF THIS PERMIT TO PROVE THE ADVERSE EFFECT CRITERIA. IF IRRIGATION UNDER PROVISIONAL PERMIT 41H 30025398 EXCEEDS A DIVERTED AND CONSUMED VOLUME OF 9.96 AF FOR TRACT 2 OF COS 2540, AND THE TOTAL CONSUMPTIVE USE OF TRACT 2 EXCEEDS 13.62 AF, THE DEPARTMENT SHALL PURSUE REVOCATION OF THIS PERMIT (41H 30116359) UNDER 85-2-314.

CONCLUSIONS OF LAW

39. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected.

Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co., 211 Mont. at 96, 685 P.2d at 331 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); *Bostwick I.* ¶ 21; *Bostwick Properties Inc. v DNRC*, 2013 MT 48, ¶¶ 25, 38, 43, 369 Mont. 150, 296 P.3d 1154 (*Bostwick II*).

40. When a proposed appropriation will deplete surface water in a closed basin, the applicant is required to demonstrate a mitigation plan to offset any depletions that would otherwise cause adverse effect to a prior appropriator. § 85-2-362, MCA.

41. Pursuant to § 85-2-362, MCA, a mitigation plan must include: where and how the water in the plan will be put to beneficial use; when and where, generally, water reallocated through exchange or substitution will be required; the amount of water reallocated through exchange or substitution that is required; how the proposed project or beneficial use for which the mitigation plan is required will be operated; evidence that an application for a change in appropriation right, if necessary, has been submitted; evidence of water availability; and evidence of how the mitigation plan will offset the required amount of net depletion of surface water in a manner that will offset an adverse effect on a prior appropriator.

42. . In this case Applicant proposes to mitigate its full consumptive use under the proposed appropriation. This mitigation provides mitigation of full depletion of surface waters by the proposed appropriation in amount, location, and duration of the depletion. Because Applicant proposes to mitigate the full amount of its consumptive use, there is no adverse effect from depletion of surface waters to the historic beneficial use of surface water rights. E.g., In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC (DNRC Final Order 2008).

43. The Applicant demonstrated that withdrawal of groundwater in the amount requested will not adversely affect other groundwater users. Furthermore, the Applicant proposes to mitigate its full consumptive use under the proposed appropriation and offset all depletion of surface waters by the proposed appropriation in amount, location, and duration of the depletion. § 85-2-

362, MCA. As conditioned, the Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. § 85-2-311(1)(b), MCA. (FOF 32-38).

Adequate Diversion

FINDINGS OF FACT

44. The proposed means of diversion, approved by MT DNRC in the original permit, include a primary well (Well 1), backup well (Well 2), and yet to be built redundant well (Well 3). Well 1 is 1,278 feet deep and is equipped with a Grundfos model #150S100-52, 11 HP pump. The pump for Well 1 has a rated capacity of up to 185 GPM and is set 515.7 feet below the ground surface. Well 2 is 1,325 feet deep and is equipped with a Grundfos model # 150S100-52, 11 HP pump. The pump for Well 2 has a rated capacity of up to 25 GPM with a variable speed up to 33 GPM and is set 618.5 feet below the ground surface. The Applicant provides the actual pump curves and settings in the application. The Applicant expects to drill Well 3 into the same aquifer for additional redundancy if required for DEQ water supply redundancy requirements. A condition from the original permit specifying the redundant wells will also be put on this supplemental permit.

45. Water from the wells fill an above-ground 530,000-gallon storage tank using a 20,000-gallon fill cycle. Water is conveyed to houses, commercial units, and sprinkler systems by means of PVC pipelines ranging from 6 to 10 inches in diameter. Connections within Tract 2 to residential and commercial units will be sized according to the water needed by the unit. The main waterline from the tank to Tracts 1 and 2 is currently 8 inches in diameter but may be switched to one 10-inch or two 8-inch PVC pipelines. The mainline from tank to Tract 2 will have a capacity of at least 1,300 GPM, which will accommodate peak usage and fire flows.

46. The combined capacity of Wells 1 and 2 (210-218 GPM) is greater than the requested flow. Only one well will operate at a time. Well 1 will operate as primary well, Wells 2 and 3 will only be operated if needed as backup. The Applicant will continue to measure and report the diversion and use according to requirements for provisional permit 41H 30025398.

47. The proposed means of diversion and conveyance are adequate for the proposed use at the planned volume and flow rate.

CONCLUSIONS OF LAW

48. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

49. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA (FOF 44-47).

Beneficial Use

FINDINGS OF FACT

50. The proposed use is potable water for municipal use being supplied to multiple domestic and commercial connections on Tract 2 of COS 2540. Genesis Engineering calculated potable water use for Applicant based on Circular DEQ 4- Table 3.1-1 and discussions with DEQ:

- 90-room hotel – 7,200 GPD
- 144 homes and 100 apartments - total home and apartment use is 42,700 GPD
- 192,500 square feet of commercial space – 15,405 GPD
- Total daily use – 65,305 GPD = 73.25 AF per annum

  Of this total use, the new permit will provide 59.05 AF, and the remainder (14.2 AF) will be provided by the existing permit.

51. The Applicant proposes keeping the total consumed volume at 13.62 AF, the same as contemplated in the original permit. At a five percent consumption rate, 3.66 AF of the 73.25 AF

diverted for potable use will be consumed. Ninety-five percent of potable use will return to the aquifer through effluent drain fields. This is the same ratio of consumptive use approved for provisional permit 41H 30025398.

1. The 5% value is based on a consumptive use analysis by Mr. Dick Stenzel, Applegate Group, Inc. (September 19, 2005) for Beneficial Use Permit Application 41H 30012025 for Utility Solutions., which was considered conservative as consumption was more likely to be 2% for buried drainfield systems. [July 26, 2007, Correspondence, Memo to Matt Williams from Applicant Consultant, File #1, Tab #49, Beneficial Use Permit 41H 30025398]

52. A condition will be placed on this permit requiring operation in conjunction with the original permit and mitigation change, as the beneficial use represented in this permit is not sufficient independently to provide municipal use, and the entire flow rate for the project is provided by provisional permit 41H 30025398. All other relevant original permit conditions will be added to this permit (see conditions in proposal and in granting).

53. The Applicant has proven that the requested 59.05 AF of volume for municipal indoor use of multiple domestic and commercial, when combined with provisional permit 41H 30025398, will provide the volume and flow rate necessary to meet estimated municipal demands.

54. The application will be subject to the following conditions, limitations, or restrictions, in order to prove the beneficial use criteria.

1. Measurement Conditions to match original permit:
    i. THE APPROPRIATOR SHALL INSTALL OR CAUSE TO BE INSTALLED METERS APPROVED BY THE DEPARTMENT TO RECORD THE FLOW RATES AND VOLUMETRIC AMOUNTS OF ALL WATER DIVERTED FROM GROUND WATER AT EACH WELL. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICES ARE IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A MONTHLY WRITTEN RECORD OF THE FLOW

RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED TO THE REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

ii. A FLOWMETER WITH TRANSMITTER SHALL BE INSTALLED IN THE PUMP HOUSE TO RECORD FLOW RATES AND TOTALIZE FLOW VOLUMES FROM THE WELL.

2. Adverse Effect Condition:

i. THIS PERMIT IS SUPPLEMENTAL TO PROVISIONAL PERMIT 41H 30025398 FOR WATER USE ON TRACT 2 OF COS 2540. THE APPLICANT PROVIDED A PLAN OF DEVELOPMENT FOR TRACT 2 OF COS 2540 WHICH DIFFERS FROM THE PLAN SUBMITTED FOR PROVISIONAL PERMIT 41H 30025398. THE APPLICANT IS RELYING ON THE NEW PLAN OF DEVELOPMENT IDENTIFIED IN THE APPLICATION MATERIALS OF THIS PERMIT TO PROVE THE ADVERSE EFFECT CRITERIA. IF IRRIGATION UNDER PROVISIONAL PERMIT 41H 30025398 EXCEEDS A DIVERTED AND CONSUMED VOLUME OF 9.96 AF FOR TRACT 2 OF COS 2540, AND THE TOTAL CONSUMPTIVE USE OF TRACT 2 EXCEEDS 13.62 AF, THE DEPARTMENT SHALL PURSUE REVOCATION OF THIS PERMIT (41H 30116359) UNDER 85-2-314.

CONCLUSIONS OF LAW

55. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. The amount of water authorized by a permit is limited to the amount of water necessary to sustain the beneficial use. *E.g., McDonald, supra*; *Toohey v. Campbell*, 24 Mont. 13, 60 P. 396(1900)*Sitz Ranch v. DNRC*, at Pg. 3 (rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).*Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003)(*affirmed on other grounds* by *Bitterroot River Protective Association v. Siebel*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518). Applicant proposes to use water for municipal purposes which is a recognized beneficial use. § 85-2-102(5), MCA.

56. Applicant has proven by a preponderance of the evidence municipal purposes are a beneficial use. Furthermore, the Applicant proved that that 59.05 AF of diverted volume, of which 2.95 AF will be consumed, is the amount needed to sustain the beneficial use. § 85-2-311(1)(d), MCA, (FOF 50-54)

Possessory Interest

FINDINGS OF FACT

57. This application is for a municipal use application in which water is supplied to another. The ultimate user will not accept the supply without consenting to the use of water supplied by the Lazy J Utility Association.

CONCLUSIONS OF LAW

58. Pursuant to § 85-2-311(1)(e), MCA, an Applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use. Where a municipal use relies upon a third party, possessory interest is satisfied at the when water is applied to beneficial use because the municipal end user with possessory interest in the place of use must consent to the use of water supplied and used thereupon. See ARM 36.12.1802(1)(b). The Applicant has

proven by a preponderance of the evidence that it has a possessory interest in the property where the water is to be put to beneficial use. § 85-2-311(1)(e), MCA. (FOF 57)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 41H 30116359 should be GRANTED.

The Department determines the Applicant may divert water from groundwater, by means of a well (primary well GWIC #223891 that is 1,278 feet, backup well GWIC #227731 that is 1,325 feet, and redundant well that is expected to be drilled into the same source aquifer), from January 1 to December 31 at 0 GPM up to 59.05 AF diverted volume and 2.95 AF consumed volume, from a point in the SWNWSE Section 5, T7S, R4E, Gallatin County, for municipal use from January 1 to December 31. The place of use is located in Tract 2 of COS 2540, which is located in Section 5, T7S, R4E, Gallatin County. Permit No. 41H 30116359 will be associated and conditioned upon use with the Applicant's existing original permit 41H 30025398, which together total 182 GPM and 135.05 AF.

The application will be subject to the following conditions, limitations or restrictions.

1. Measurement Conditions to match original permit:
    i. THE APPROPRIATOR SHALL INSTALL OR CAUSE TO BE INSTALLED METERS APPROVED BY THE DEPARTMENT TO RECORD THE FLOW RATES AND VOLUMETRIC AMOUNTS OF ALL WATER DIVERTED FROM GROUND WATER AT EACH WELL. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICES ARE IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A MONTHLY WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED TO THE

REGIONAL OFFICE BY JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

ii. A FLOWMETER WITH TRANSMITTER SHALL BE INSTALLED IN THE PUMP HOUSE TO RECORD FLOW RATES AND TOTALIZE FLOW VOLUMES FROM THE WELL.

2. Diversion Means Condition to match original permit:
    i. DIVERSION ID 2 AND 3 ARE REDUNDANT WELLS. ONLY 1 OF THE 3 WELLS MAY BE USED AT ONE TIME.
3. Mitigation Condition:
    i. USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON MITIGATION BEING PROVIDED UNDER CHANGE AUTHORIZATION 41H 30102910. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE UNTIL THE PERMITTEE RECEIVES APPROVAL TO INCLUDE THIS PERMIT AS BEING MITIGATED UNDER CHANGE AUTHORIZATION 41H 30102910. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE IF MITIGATION WATER AS HEREIN REQUIRED IS NOT OBTAINED. DIVERSION UNDER THIS APPLICATION, EXCEPT FOR EMERGENCY USE, MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION AND DURATION CEASES.
4. Adverse Effect Condition:
    i. THIS PERMIT IS SUPPLEMENTAL TO PROVISIONAL PERMIT 41H 30025398 FOR WATER USE ON TRACT 2 OF COS 2540. THE APPLICANT PROVIDED A PLAN OF DEVELOPMENT FOR TRACT

2 OF COS 2540 WHICH DIFFERS FROM THE PLAN SUBMITTED FOR PROVISIONAL PERMIT 41H 30025398. THE APPLICANT IS RELYING ON THE NEW PLAN OF DEVELOPMENT IDENTIFIED IN THE APPLICATION MATERIALS OF THIS PERMIT TO PROVE THE ADVERSE EFFECT CRITERIA. IF IRRIGATION UNDER PROVISIONAL PERMIT 41H 30025398 EXCEEDS A DIVERTED AND CONSUMED VOLUME OF 9.96 AF FOR TRACT 2 OF COS 2540, AND THE TOTAL CONSUMPTIVE USE OF TRACT 2 EXCEEDS 13.62 AF, THE DEPARTMENT SHALL PURSUE REVOCATION OF THIS PERMIT (41H 30116359) UNDER 85-2-314.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection, the application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to an application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the permit or change in appropriation right, the department will grant the permit or change subject to conditions necessary to satisfy applicable criteria.

DATED this 8th day of March 2021

/original signed by Kerri Strasheim/
Kerri Strasheim, Regional Manager
Bozeman Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 8th day of March 2021, by first class United States mail.

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C/O SCOTT ALTMAN
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_____ _____

NAME DATE